

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JUNIE TAJIME and TETSURO TAKIZAWA

Appeal 2007-0658
Application 09/334,354
Technology Center 2600

Decided: May 31, 2007

Before JAMES D. THOMAS, MAHSHID D. SAADAT, and ALLEN R. MACDONALD, *Administrative Patent Judges*.

SAADAT, *Administrative Patent Judge*.

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1-18, which are all of the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b).

Appellants' invention relates to an apparatus and a method for decoding a moving picture wherein a quantization controller controls the rate of compression applied to an image based on a bit number of a memory access unit. Appellants' Access Width Control Section 110 (Specification

Figure 1) affects the compression rate by applying “control to the quantization control section 109” such that the “information content for a single or a plurality of memory compression processing units or for every control unit of memory compression processing is conformed to be equal to or less than the bit number of a memory access unit.” (Specification 10: 25 through 11: 6).

Such quantization control improves compression and expansion processing speed by reducing “the number of a memory access [sic] to the compressed image necessary for the expansion.” (Specification 15: 4-11). Thus, the Access Width Control Section 110 serves to accomplish efficient access to the memory by accounting for “an access width of the memory . . . in a memory compression and expansion section.” (Specification 2: 14-18 and 22-23).

Independent Claim 1, the broadest claim, reads as follows:

1. A moving picture decoding apparatus to which a compressed stream generated using inter-frame prediction is input, said apparatus comprising:

a compressor that compresses a decoded image and stores the resulting compressed image in a memory;

an expander that expands a compressed image stored in said memory;

a quantization controller that controls how quantization is performed in said compressor; and

a memory access width controller that controls said quantization controller such that bit allocation is controlled in relation to a number of bits of a memory access unit of said memory.

The Examiner relies on the following prior art in rejecting the claims:

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|----------|-----------------|--|
| Ohira | US 6,208,689 B1 | Mar. 27, 2001 (filed Feb. 26, 1997) |
| Nakajima | US 6,243,421 B1 | Jun. 5, 2001 (filed Feb. 10, 1997) |

The Examiner rejected claims 1-14 and 16-18 under 35 U.S.C. § 102(e) as anticipated by Ohira and claim 15 under 35 U.S.C. § 103(a) as being unpatentable over Ohira and Nakajima.

Rather than repeat the arguments here, we make reference to the Brief and the Answer for the respective positions of the Appellants and the Examiner.

We reverse.

ISSUE

Appellants and the Examiner disagree as to whether Ohira discloses, “a memory access width controller that controls said quantization controller such that bit allocation is controlled in relation to a number of bits of a memory access unit of said memory.” Appellants contend that Ohira is silent as to this limitation and “at no time . . . discuss[es] the bus accessing the memory (the memory access unit).” (Br. 10). The Examiner contends that a data bus *per se* is not claimed and that “sections 106 and 107a of Ohira provides the same access width controller that controls the quantization controller.” (Answer 8).

The issue, therefore, is whether the Examiner erred in rejecting the claims under 35 U.S.C. §§ 102(e) and 103(a). The issue specifically turns on whether Ohira anticipates Appellant’s claimed invention by disclosing “a memory access width controller that controls said quantization controller

such that bit allocation is controlled in relation to a number of bits of a memory access unit of said memory.”

FINDINGS OF FACT

Ohira shows an image decoding apparatus (Fig. 18) in which a compression rate judging section 106 receives image size information (col. 12, l. 63 through col. 13, l. 9).

As cited by Examiner, Ohira’s compression rate judging section 106 receives the image size information and judges a compression rate “based upon the size of the image in connection with the storage capacity of the frame memory” (col. 13, ll. 28-29). The image size information 156 may be “any identifier for identifying the size of image” and may be “provided externally to the compression rate judging section 106.” (Ohira, col. 13, ll. 36-37). The compressing section 107a then compresses the data “based upon the rate judged by the compression rate judging section 106 and then sends compressed decoded data . . . to the frame memory 103 to be stored.” (Ohira, col. 13, ll. 39-44).

Ohira further discloses that the prior art image processing apparatuses feature a memory bus that transfers information between various data processing units and to and from an external memory (Figure 54, col. 1, ll. 16-63). Ohira seeks to solve the problem of providing efficient use of memory capacity (col. 2, ll. 19-26). Our review of the text and Figures of Ohira reveals a lack of any reference to compression based on either a bus accessing the memory or a memory access unit in general.

PRINCIPLES OF LAW

A rejection for anticipation requires that the four corners of a single prior art document describe every element of the claimed invention, either expressly or inherently, such that a person of ordinary skill in the art could practice the invention without undue experimentation. *See Atlas Powder Co. v. IRECO, Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1946 (Fed. Cir. 1999); *In re Paulsen*, 30 F.3d 1475, 1478-79, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994).

ANALYSIS

As described above, Ohira indicates that compression rate judging section 106 judges the compression rate only in relation to two factors: (a) the size of the image of the encoded data; and (b) the storage capacity of the frame memory. Neither of these two elements indicates how Ohira supports judging a compression rate in relation to a memory access unit. Thus, we disagree with the Examiner that “sections 106 and 107a of Ohira provide[] the same access width controller that controls the quantization controller such that bit allocation is controlled in relation to a number of bits of a memory access unit of the memory.” (Answer 8) (Emphasis added). In that regard, we find ourselves persuaded by Appellants’ contention that Ohira’s “compression rate is decided based on the storage capacity [of the frame memory] and the image size” and not on “the number of bits of a memory access unit specific to the memory.” (Br. 9, 10).

CONCLUSION

On the record before us, the Examiner fails to make a *prima facie* case that Ohira anticipates claim 1 or other independent claims which require “a memory access width controller that controls said quantization controller such that bit allocation is controlled in relation to a number of bits of a memory access unit of said memory.” Therefore, in view of our analysis above, the 35 U.S.C. § 102 rejection of claims 1-14 and 16-18 cannot be sustained. Additionally, the 35 U.S.C. § 103 rejection of claim 15 over Ohira and Nakajima cannot be sustained as we fail to find any teachings in Nakajima to overcome the deficiencies of Ohira discussed above.

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DECISION

The decision of the Examiner rejecting claims 1-14 and 16-18 under 35 U.S.C. § 102 and claim 15 under 35 U.S.C. § 103 is reversed.

REVERSED

tdl/gw

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